

Rec'd PCT/PTO 25 MAR 2005

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 14 JAN 2005

W/PO

PCT

Applicant's or agent's file reference MCR/41125PCT1	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/IB 02/04004	International filing date (day/month/year) 27.09.2002	Priority date (day/month/year) 27.09.2002
International Patent Classification (IPC) or both national classification and IPC H04Q11/00		
Applicant NOKIA CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 01.04.2004	Date of completion of this report 13.01.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Forster, G Telephone No. +49 89 2399-8986 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 02/04004**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-13 as originally filed

Claims, Numbers

1-24 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/B 02/04004**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1
Inventive step (IS)	Yes: Claims	
	No: Claims	2-24
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 02/04004

to section V.

1. Reference is made to the following document cited in the international search report.

D1: US 2001/034793 A1

- 2.1 As pointed out in the paragraph 'Remarks concerning clarity deficiencies' below, the various definitions of the invention given in independent claims 1, 18 and 24 are such that the claims as a whole are not clear and concise, contrary to Article 6 PCT. Carrying out the examination of the claim with the broadest scope i.e. claim 1, document D1 (cf. abstract), which is considered to represent the most relevant state of the art, discloses a multicast-enabled network element comprising a first logical interface for receiving data from a first host, a second logical interface for transmitting said data to one or more further hosts, a processor for defining a group comprising one or more further hosts (cf. paragraph 0046), wherein a further host is added to the group in response to the reception of a request and a cache wherein said network element is configured to store received data in the cache until a predetermined condition is met and in response to the meeting of this condition to forward the data to said further hosts in said group and the processor is configured to limit the group to further hosts situated at the same location (cf. paragraph 0053).

Therefore claim 1 does not satisfy the criterion set forth in Article 33(2) PCT because its subject-matter is not new in respect of the prior art as defined in the regulations (Rule 64(1)-(3) PCT).

Furthermore, it should be noted that even if novelty of claim 1 could be argued, based on minor differences between the features of said claim and those disclosed in document D1, the subject-matter of claim 1 would not involve an inventive step, (Rule 65(1)(2) PCT), since the underlying design principle is disclosed in D1 and these minor differences would be considered to be simple design measures lying well within the normal design competence of a person skilled in the art.

- 2.2. The differences between the subject-matter of independent claims 18 and 24 and that of claim 1 relate, as stated earlier in paragraph 2.1, only to minor details and are either directly derivable from the above mentioned prior art document or lie

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 02/04004

- well within the normal design competence of a person skilled in the art. These claims, in addition to the above raised clarity and conciseness objection, therefore contain nothing of inventive significance, contrary to Article 33(3) PCT.
3. The additional features of the respective dependent claims relate to minor details and are either directly derivable from the above mentioned prior art document or represent simple modifications of the prior art and thus lie within the normal design competence of a skilled person. These claims therefore, either alone or in combination appear to add nothing of inventive significance to the respective independent claims and thus do not satisfy the criterion set forth in Article 33(3) PCT.
 - 4.1 Furthermore, independent claim 9 contains the corresponding features of claim 1 merely in terms of a method claim. Therefore the subject-matter of this claim does not involve an inventive step (Rule 65(1)(2) PCT) and thus does not satisfy the criterion set forth in Article 33(3) PCT.
 - 4.2 The additional features of the dependent claims 10 to 15 relate to minor details and are therefore also either directly derivable from the above mentioned prior art documents or represent simple modifications of the prior art and thus lie within the normal design competence of a skilled person. These claims therefore, either alone or in combination add nothing of inventive significance to claim 9 and thus do not satisfy the criterion set forth in Article 33(3) PCT.
 5. The same objection put forward in paragraph 4.1 is also valid for the independent claim 16, since this claim seeks protection for a computer program comprising program instructions for causing a network element to perform each of the steps of any one of the claims 9 to 15, which have been found to lack an inventive step. Claim 16 does not meet the requirements set forth in Article 33(3) PCT, because the subject-matter of this claim, i.e. the implementation of a method lacking any inventive significance in a computer program does not involve an inventive step.
 6. The additional feature of dependent claim 17 i.e. the embodiment of the computer program on a computer readable medium is a mere design detail and adds nothing of inventive significance to independent claim 16, contrary to Article 33(3) PCT.

Remarks concerning formal deficiencies

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 02/04004

In order to meet the requirements of Rule 5.1(a)(ii) PCT, the cited document D1 should have been identified in the description and the relevant background art disclosed therein should have been briefly discussed.

2. Reference signs in parentheses should have been inserted in the claims to increase their intelligibility, Rule 6.2(b) PCT.

Remarks concerning clarity deficiencies

1. The application contains 3 independent claims of overlapping scope i.e. claims 1, 18 and 24 concerning a multicast-enabled network element. The subject-matter set out in these claims relates to embodiments having the same essential technical features and differing only in minor details. The requirements of Article 6 PCT regarding conciseness and clarity of these claims as a whole are thus not met. These claims should have been recast to include only one independent claim for said network element with dependent claims as appropriate, Rule 6.4(a)-(c) PCT.
2. Dependent claims 2, 6 and 23 do not meet the requirements of Article 6 PCT with respect to clarity, because they contain a mixture of method and apparatus features. It should be emphasized that claims to a network element are regarded as claims to an apparatus and not as claims to a method or process. Thus, in order to meet the requirements of Article 6 PCT with respect to clarity, the network element claimed in these claims should have been defined in terms of apparatus features and not by the steps of a method or process. This could have been done by utilizing a wording such as '... configured to ...', '... arranged to ...' or '... for ...'.
3. Independent claim 16 is unclear because the formulation '... to perform the method of any one of the claims 9 to 15' is too vague. Instead a formulation should have been chosen leaving no doubt that the computer program comprises program instructions ... to perform each of the method steps of any one of the claims 9 to 15.



P.B.5818 - Patentlaan 2
2280 HV Rixswijk (ZH)
☎ (070) 3 40 20 40
FAX (070) 3 40 30 16

Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

Generaldirektion 1

Directorate General 1

Direction générale 1

READ, Matthew
Venner, Shipley & Co.
20 Little Britain
London EC1A 7DH
GRANDE BRETAGNE



EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date
11.02.05

Reference	Application No./Patent No. 02772655.3 - 2416 PCT/IB0204004
Applicant/Proprietor Nokia Corporation	

Entry into the European phase before the European Patent Office

These notes describe the procedural steps required for entry into the European phase before the European Patent Office (EPO). You are advised to read them carefully: failure to take the necessary action in time can lead to your application being deemed withdrawn.

1. The above-mentioned international patent application has been given European application No. 02772655.3.
2. Applicants without a residence or their principal place of business in an EPC contracting state may themselves initiate European processing of their international applications, provided they do so before expiry of the 31st month from the priority date (see also point 6 below).

During the European phase before the EPO as designated or elected Office, however, such applicants must be represented by a professional representative (Arts. 133(2) and 134(1), (7) EPC).

Procedural acts performed after expiry of the 31st month by a professional representative who acted during the international phase but is not authorised to act before the EPO have no legal effect and therefore lead to loss of rights.

Please note that a professional representative authorised to act before the EPO and who acted for the applicant during the international phase does not automatically become the representative for the European phase. Applicants are therefore strongly advised to appoint in good time any representative they wish to initiate the European phase for them; otherwise, the EPO has to send all communications direct to the applicant.

3. Applicants with a residence or their principal place of business in an EPC contracting state are not obliged to appoint, for the European phase before the EPO as designated or elected Office, a professional representative authorised to act before the EPO. However, in view of the complexity of the procedure it is recommended that they do so.
4. Applicants and professional representatives are also strongly advised to initiate the European phase using EPO Form 1200 (available free of charge from the EPO). This however is not compulsory.



5. To enter the European phase before the EPO, the following acts must be performed.
(N.B.: Failure validly to do so will entail loss of rights or other adverse legal consequences.)

- 5.1 If the EPO is acting as **designated** or **elected** Office (Arts. 22(1)(3) and 39(1) PCT respectively), applicants must, within 31 months from the date of filing or (where applicable) the earliest priority date:

- a) Supply a translation of the international application into an EPO official language, if the International Bureau did not publish the application in such a language (Art. 22(1) PCT and Rule 107(1)(a) EPC).

If the translation is not filed in time, the international application is deemed withdrawn before the EPO (Rule 108(1) EPC).

This loss of rights is deemed not to have occurred if the translation is then filed within a two-month grace period as from notification of an EPO communication, provided a surcharge is paid at the same time (Rule 108(3) EPC).

- b) Pay the national basic fee (EUR 125,00) and, where a supplementary European search report has to be drawn up, the search fee (EUR 690,00 ; Rule 107(1)(c) and (e) EPC).
- c) If the time limit under Article 79(2) EPC expires before the 31-month time limit, pay the designation fee (EUR 75,00) for each contracting state designated (Rule 107(1)(d) EPC).
- d) If the time limit under Article 94(2) EPC expires before the 31-month time limit, file the written request for examination and pay the examination fee (EUR 1430,00 ; Rule 107(1)(f) EPC).
- e) Pay the third-year renewal fee (EUR 380,00) if it falls due before expiry of the 31-month time limit (Rule 107(1)(g) EPC).

If the fees under (b) to (d) above are not paid in time, or the written request for examination is not filed in time, the international application is deemed withdrawn before the EPO, or the contracting-state designation(s) in question is (are) deemed withdrawn (Rule 108(1) and (2) EPC). However, the fees may still be validly paid within a two-month grace period as from notification of an EPO communication, provided the necessary surcharges are paid at the same time (Rule 108(3) EPC). For the renewal fee under (e) above, the grace period is six months from the fee's due date (Article 86(2) EPC).

- 5.2 If the application documents on which the European grant procedure is to be based comprise more than ten claims, a claims fee is payable within the 31-month time limit under Rule 107(1) EPC for the eleventh and each subsequent claim (Rule 110(1) EPC). The fee can however still be paid within a one-month grace period as from notification of an EPO communication pointing out the failure to pay (Rule 110(2) EPC).
6. If the applicant had a representative during the application's international phase, the present notes will be sent to the representative, asking him to inform the applicant accordingly.

All subsequent communications will be sent to the applicant, or - if the EPO is informed of his appointment in time - to the applicant's European representative.



Date

Sheet 3

Application No. 02772655.3

7. For more details about time limits and procedural acts before the EPO as designated and elected Office, see the EPO brochure

How to get a European patent
Guide for applicants - Part 2
PCT procedure before the EPO - "Euro-PCT"

This brochure, the list of professional representatives before the EPO, Form 1200 and details of the latest fees are now all available on the Internet under

<http://www.european-patent-office.org>

RECEIVING SECTION



Rec'd PCT/PTO 25 MAR 2005

Copy for the Elected Office (EO/EP)

PCT/IB2002/004004

PATENT COOPERATION TREATY

30

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE

(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

READ, Matthew
Venner, Shipley LLP
20 Little Britain
London EC1A 7DH
United Kingdom

Date of mailing (day/month/year) 07 July 2004 (07.07.2004)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference PSD/46470GEN1	
International application No. PCT/IB2002/004004	International filing date (day/month/year) 27 September 2002 (27.09.2002)

1. The following indications appeared on record concerning:

☐ the applicant

☐ the inventor

☒ the agent

☐ the common representative

Name and Address

READ, Matthew
Venner, Shipley & Co.
20 Little Britain
London EC1A 7DH
United Kingdom

EPO - DG 1

15.07.2004

(107)

State of Nationality

State of Residence

Telephone No.

44 20 7600 4212

Facsimile No.

44 20 7600 4188

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person

☐ the name

☒ the address

☐ the nationality

☐ the residence

Name and Address

READ, Matthew
Venner, Shipley LLP
20 Little Britain
London EC1A 7DH
United Kingdom

State of Nationality

State of Residence

Telephone No.

44 20 7600 4212

Facsimile No.

44 20 7600 4188

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒ the receiving Office

☐ the International Searching Authority

☒ the International Preliminary Examining Authority

☐ the designated Offices concerned

☒ the elected Offices concerned

☐ other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338.70.60

Authorized officer

V. BLANC

Telephone No. (41-22) 338 9666

006338401